

A COMPARISON OF THE SELF-CONCEPTS
AND PATTERNS OF CAREER DEVELOPMENT
OF STUDENTS IDENTIFIED AS POTENTIAL
DROPOUTS WITH THOSE OF STUDENTS THOUGHT
TO BE LIKELY TO COMPLETE SCHOOL

CENTRE FOR NEWFOUNDLAND STUDIES

**TOTAL OF 10 PAGES ONLY
MAY BE XEROXED**

(Without Author's Permission)

ANNE M. HUMPHRIES





National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service

Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30, and subsequent amendments.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, S.R.C. 1970, c. C-30, et ses amendements subséquents.

A COMPARISON OF THE SELF-CONCEPTS
AND PATTERNS OF CAREER DEVELOPMENT
OF STUDENTS IDENTIFIED AS POTENTIAL
DROPOUTS WITH THOSE OF STUDENTS
THOUGHT TO BE LIKELY TO COMPLETE SCHOOL

by

Anne M. Humphries, B.A. (Ed.)

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Education

Department of Educational Psychology
Memorial University of Newfoundland

April 1989

St. John's

Newfoundland



National Library
of Canada

Bibliothèque nationale
du Canada

Canadian Theses Service Service des thèses canadiennes

Ottawa, Canada
K1A 0N4

The author has granted an irrevocable non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of his/her thesis by any means and in any form or format, making this thesis available to interested persons.

The author retains ownership of the copyright in his/her thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without his/her permission.

L'auteur a accordé une licence irrévocable et non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de sa thèse de quelque manière et sous quelque forme que ce soit pour mettre des exemplaires de cette thèse à la disposition des personnes intéressées.

L'auteur conserve la propriété du droit d'auteur qui protège sa thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

ISBN 0-315-50446-3

Canada

ABSTRACT

This study attempted to determine whether or not differences existed between the self-concepts and patterns of career development of students who were identified as potential dropouts and those who were identified as being likely to remain in school. The sample consisted of one hundred eighty-nine students from three elementary schools. Data were collected from grade three and six students using a survey-type questionnaire and from their teachers using a prediction checklist. The analysis of these data consisted of crosstabulating the variables constituting self-concept as it relates to career development with the students' predicted academic futures and using chi-square analysis to reject the null hypothesis at the .05 level of significance.

The theoretical constructs of the research were based upon the developmental theories of career decision-making and the major instrument was designed to assess the dimensions of career maturity deemed to be important at this level. Information was collected with respect to the students' levels of occupational knowledge, the nature of their work values, their degree of decision-

making ability and self-knowledge and understanding, their ability to see some link between school and the world of work, the amount and type of career role models available to them, their occupational and educational aspirations, and the degree of sex role stereotyping present with respect to their perceptions of various occupations.

The factors chosen to investigate the nature of self-concept as it relates to career development included the career and educational aspirations of the students, their occupational knowledge, and degree of self-knowledge and understanding. Of these factors, those which were affective in nature were found to contribute most significantly to the differences in self-concept which existed between the three groups of students. These groups were selected by means of teacher nominations and consisted of students thought to be likely to drop out of school, complete school, and attend a post secondary institution.

Recommendations for research and practise were made with respect to programming needs for career guidance in the elementary school, particularly as it relates to the potential dropout.

ACKNOWLEDGEMENTS

The writer wishes to gratefully acknowledge the assistance and support offered by several special individuals during the completion of this project: to my advisor, Mrs. Mildred Cahill, for her direction and advice. To Dr. William Spain, for his help in times of trouble. To my parents, for a lifetime of love and encouragement. To my colleagues, Ann, Rosanne, and Rosemary, with whom I worked so closely. To Mr. C.M. Pinsent, Bonavista-Trinity-Placentia Integrated School Board and Mr. R. Tilley, Avalon Consolidated School Board, for permitting the collection of data in their schools. Sincerest thanks.

TABLE OF CONTENTS

	Page
Abstract.....	11
List of Tables.....	vii
CHAPTER	
I INTRODUCTION TO THE STUDY	1
Purpose.....	1
Rationale and Significance.....	1
Definition of Terms.....	10
Research Questions.....	13
Limitations.....	16
II REVIEW OF THE LITERATURE	18
Characteristics of the Dropout.....	18
Characteristics of the Elementary	
School Child.....	21
Career Development and the Elementary	
School Child.....	23
Variables that Influence Career	
Development During the Growth Stage..	31
Teacher Prediction as a Means of	
Identifying Student Outcomes.....	39
Summary.....	41
III METHODOLOGY	43
Procedures.....	43

	The Sample.....	44
	The Instruments.....	44
	Method of Data Collection.....	47
	Confidentiality.....	48
	Preparation for Analysis.....	48
	Statistical Analysis.....	51
IV	ANALYSIS OF THE RESEARCH QUESTIONS	52
	Summary.....	83
V	CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS.....	84
	Students Identified as Potential Dropouts.....	84
	Students Identified as Being Likely to Complete High School.....	87
	Students Identified as Being Likely to Attend a Post Secondary Institution..	89
	Summary.....	91
	The Potential Dropout.....	92
	Summary.....	99
	Recommendations.....	101
	References.....	105
	Appendix A - Career Maturity Survey.....	116
	Appendix B - Teacher Prediction Checklist.....	125

LIST OF TABLES

Table		Page
1	Sample Size.....	45
2	Crosstabulation of the Predicted Academic Futures of Students by Socioeconomic Status of Career Aspirations.....	54
3	Crosstabulation of the Predicted Academic Futures of Students by the Educational Aspirations of Students.....	57
4	Crosstabulation of the Predicted Academic Futures of Students by the Ability to Match Job Titles with Job Descriptions...	60
5	Crosstabulation of the Predicted Academic Futures of Students by Knowledge of the Educational Requirements of Occupations.....	61
6	Crosstabulation of the Predicted Academic Futures of Students by Knowledge of Differences in Earnings.....	62
7	Crosstabulation of the Predicted Academic Futures of Students by Ability to Classify Occupations.....	65

8	Crosstabulation of Predicted Academic Futures of Students by Work Values.....	68
9	Crosstabulation of Predicted Academic Futures of Students by Characteristics of Occupations Valued by Students.....	70
10	Crosstabulation of Predicted Academic Futures of Students by Self-Concept.....	72
11	Crosstabulation of Predicted Academic Futures of Students by Students' Perceived Strengths.....	75
12	Crosstabulation of Predicted Academic Futures of Students by Students' Perceived Weaknesses.....	76
13	Crosstabulation of Predicted Academic Futures of Students by Sex.....	78
14	Crosstabulation of Predicted Academic Futures of Students by Grade.....	78
15	Crosstabulation of Predicted Academic Futures of Students by Age in Grade 3....	79
16	Crosstabulation of Predicted Academic Futures of Students by Age in Grade 6....	79
17	Crosstabulation of Predicted Academic Futures of Students by Place of Residence.....	80

18	Crosstabulation of Predicted Academic Futures of Students by Socioeconomic Status of Father's Occupation.....	80
19	Crosstabulation of Predicted Academic Futures of Students by Number of Children in Family.....	81
20	Crosstabulation of Predicted Academic Futures of Students by Presence of Mother.....	82
21	Crosstabulation of Predicted Academic Futures of Students by Presence of Father.....	82

CHAPTER I

Introduction to the Study

Purpose

The purpose of this study was to determine whether or not there were differences between the self-concepts and resulting patterns of career development of students identified as potential dropouts and those who were thought to be likely to remain in school.

Rationale and Significance

It appears to be somewhat paradoxical that the dropout problem is reaching crisis proportions at a time when the numbers of children who leave school before graduation are much lower than they have been in the past (Schreiber, 1964). The concern with respect to this problem rests heavily upon evidence which indicates that dropouts are significantly less well in their ability to contribute meaningfully to a society which is becoming increasingly complex and technologically-advanced. The opportunities available to the school dropout have diminished drastically as more and more people have come

to accept the fact that in today's world, formal education has become a necessity.

The existing literature has tended to paint a rather dismal picture of the school dropout. The characteristics attributed to dropouts are cumulative and may be evident at the elementary school level (Gadwa & Griggs, 1985). For example, school dropouts have been shown to have had learning problems from primary to high school, to be predominantly male, to have experienced repeated failures, to demonstrate poor attendance and a lack of involvement in extracurricular activities, to be discipline problems, to often come from large, sometimes broken families, to be from low socioeconomic backgrounds that do not encourage high aspirations, to demonstrate low self-esteem, to experience feelings of isolation and alienation, and to often be from rural areas (Pawlovich, 1985; Gadwa & Griggs, 1985; Leaving Early, 1984; Titone, 1982; Whiteside & Merriman, 1976; Reich & Young, 1975). On the basis of such information, it is evident that these characteristics are on-going as opposed to age-specific and that any meaningful intervention should occur before students reach secondary school (Reich & Young, 1975).

The purpose of schooling is often regarded in terms

of its cultural benefits which include the facilitation of socialization, the development of cognitive abilities, the maximization of each individual's potential, and the transmittal of cultural values (Sewell, Palmo, & Manni, 1981). While recognizing the importance of such benefits, one must not overlook the economic consequences of schooling as the school plays a very important role in preparing individuals for the world of work.

Research indicates that many of those students who physically leave school at the age of sixteen have in fact, already dropped out of school psychologically as early as the age of eight (Herr & Cramer, 1988). This is often thought to occur because these students fail to sense the relationship between what they learn in school and life as they experience it outside the school. Some generalize school failures or feelings of incompetence to all academic experiences. They acquire a psychological set that generates resistance to schooling and to the possibility of working toward a self-fulfilling future (Herr & Cramer, 1988). As a result, the decision to leave or to remain in school can be considered a vocational decision.

For the purpose of this research, career behavior was viewed from the developmental perspective. The

developmental theories are, for the most part, concerned with the longitudinal expressions of career behavior and emphasize the importance of the self-concept. Career development is conceptualized as a continuous process, beginning early in life, in which an individual moves through various life stages by mastering the developmental tasks therein (Ginzberg, Ginsburg, Axelrad, & Herma, 1951, as cited in Herr & Cramer, 1988). It represents more than just the process of choosing a job. Super and Bohn (1970) reported that it involves preparing for, playing, and relinquishing various roles throughout the entire life span. The major roles played by an individual throughout the course of a lifetime include those of child, student, worker, leisurite, citizen, spouse, parent, homemaker, or pensioner (Super, 1982).

Because career development refers to an individual's attempt to develop and implement an identity, Super (1957, as cited in Herr & Cramer, 1988) has strongly linked it with the process of personal development. The basic thrust of his theory is that individuals aspire to and choose occupations that permit them to function in roles that are consistent with their self-concepts.

According to Super and Bohn (1970), self-concepts are the pictures people have of themselves which are

formed in early experiences with other people and with life situations. They are a product of the interaction of inherited aptitudes and abilities, the opportunity to play various roles in life, and the evaluations of the extent to which the results of role-playing meet the approval of significant others (Super, 1953, as cited in Herr & Cramer, 1988).

Like many psychologists, Super maintained that an individual's behavior is determined in part by his/her self-perceptions, perceptions of the world, and of his/her own personal situation. Research has shown that self-concept relates to such things as readiness for school (Mills, 1984), academic achievement (Gadzella & Williamson, 1984), and moral development (Wideman & Clarke, 1987) and while statements of causation have not been able to be made with respect to the impact of affective variables such as self-concept on variables like academic achievement (Chapman, Cullen, Boersma & Maguire, 1981), it is generally felt that such relationships are reciprocal. Super and Bohn (1970) have hypothesized this type of relationship between self-concept and career development in that self-concepts are developed and translated into occupational terms through identification, experience, and observation, and experiences in

educational and occupational settings lead to the confirmation or modification of them.

The assessment of self-concept has posed a problem for many psychologists. Some have considered that self-report methods are most appropriate while others have preferred to utilize methods which involve having other people infer and report on an individual's self-concept based upon observations of his/her behavior. Super (1969) maintained that since an individual's concepts of him/herself are best known to him/her, self-report methods are essential.

An important aspect of self-concept, as defined by Super, which must be considered with respect to its assessment is the individual's opportunity for role-playing. With respect to the elementary school child the roles which must be examined are those of the child and the student. It is felt by the author that the major components of self incorporated within these roles include the self as a social being, self as a learner, and self as a future worker.

Occupational choice is not viewed as a single decision but rather as a series of decisions, each of which is related to those which precede and follow it. Super (1980) maintained that the nonoccupational roles

played by an individual prior to entering the adult role of worker influence the positions which this individual will occupy as well as the way in which their expectations will be met. He further contended that success in one role would facilitate success in others and difficulties in one would likely precipitate difficulties in others. It would follow then, that the negative school experiences of dropouts, as already outlined, would influence the nature of their occupational experiences.

If the school dropout is viewed in terms of the developmental theories of career decision-making, it can be hypothesized that the individual possesses less positive perceptions of him/herself as a future worker because of the interaction of negative personal and situations factors, the lack of success experienced with respect to school performance and maintaining personal relationships, and his/her own evaluation of performance in these areas based upon the expectations of others. These self-perceptions are reflected in the career choices. It may also be said that the school dropout has not reached the same level of career development as peers who recognize school as a necessary component of preparation for life. Research indicates that as early as grade three, children have well developed attitudes

regarding occupations and levels of education (Nelson, 1963). Consequently, it may be suggested that if an individual believes that he/she is incapable of achieving in school, he/she would likely develop a rather pessimistic and limited view of the roles which he/she is able to occupy with respect to the world of work. As a result, he/she may come to view school as being detached from the kinds of careers to which he/she feels able to aspire.

It is generally accepted that an individual's self-concept begins to take form very early in life (Herr & Cramer, 1988; Mills, 1984). Therefore, if assistance is to be provided to the potential dropout, it should be done very early in his/her school career, so as to facilitate the development of a healthy self-concept and a positive image of the future. Recent research has accumulated considerable evidence which suggests that our image of the future is a powerful motivating force and determines what we are motivated to learn and to achieve (Torrance, 1983). Such levels of aspiration, achievement motivation, and self-perceptions are the elements of behavior, that in later life, manifests itself in the form of career identity and commitment or juvenile delinquency and early school leaving (Herr & Cramer,

1988).

A great deal is known about the development of the elementary school child. We have at our disposal, very specific knowledge of the stages through which an individual progresses in terms of his/her physical, cognitive, social, and moral development. With respect to career development, much has been written to suggest that it has its genesis in the early years of childhood (Holland, 1981; Parker, 1970; Creason & Schilson, 1970). The developmental tasks which present themselves during this life stage have been generally defined, but there has been as yet, no delineation of the specific behaviors which constitute career maturity at this level. It is necessary therefore, to determine what developmental standards exist with respect to career development among elementary school children. Such a delineation would permit an understanding of the degree and nature of the differences which exist between the self-concepts and patterns of career development of those students identified as potential dropouts, and those thought to be likely to remain in school. A knowledge of these differences is necessary before direction can be provided for the development of early intervention programs aimed at assisting the potential dropout.

Definition of Terms

- Dropout:** A dropout is defined as a student who withdraws or is dropped from membership in a school for any reason except death or transfer to another school before graduating from secondary school (Grade 12).
- Self-concept:** Self-concept is the picture that one has of oneself which results from the interaction of a variety of personal and situational factors as well as from one's own evaluation of the extent to which their performance in the various life roles meets the expectations of significant others (Super & Bohn, 1970).
- Career:** Career can be defined as the sequence of occupations, jobs, and positions engaged in or occupied throughout the lifetime of a person. Viewed economically, a career is a series of positions occupied by a person as a means of preparing to earn, earning, or withdrawing from the earning of a livelihood. Viewed sociologically, it is a series of roles played by a person, in

which the nature of each role played and the way in which it is played, have some bearing on the nature of the next role in the series. Viewed psychologically, a career is also a series of roles played by a person, the choice and success of which are determined in part by aptitudes, interests, values, needs, prior experiences, and expectations of the person in question (Super & Bohn, 1970).

Career Maturity: Career maturity refers to the repertoire of behaviors pertinent to identifying, choosing, planning, and executing career goals available to a specific individual, as compared with those possessed by an appropriate peer group; being at an average level of career development for one's age (Super, 1957).

Career Development: Career development refers to the total constellation of psychological, sociological, educational, physical, economic and chance factors that combine to shape the career of any given individual; those aspects of an individual's experience

which are pertinent to choice, entry, and progress in educational, vocational and avocational pursuits; the process by which one develops and refines such characteristics as self and career identity, planfulness, and career maturity. The life-long behavioral processes and the influences on them that lead to one's work values, choice of occupation(s), creation of a career pattern, decision-making style, role integration, self- and career-identity, educational literacy, and related phenomena (Herr & Cramer, 1988).

Developmental Task: A developmental task refers to a task which arises at or about a certain period in the life of the individual, unsuccessful achievement of which leads to unhappiness in the individual, disapproval by society, and difficulty with later tasks (Havighurst, 1953).

Urban: For the purpose of this study, an urban center was considered to be one in which the population exceeded 10,000.

Rural: For the purpose of this study, a rural

center was one in which the population was less than 2,500.

Research Questions

The following research questions attempt to delineate the differences between the self-concepts and patterns of career development of Newfoundland elementary school children who have been identified by their teachers as being likely to drop out of school, to complete high school, or to attend a post secondary institution. The specific variables analyzed with respect to these questions constitute self-concept, as defined for the purpose of this study, and are described in Chapter III.

Career Aspirations and Expectations

Research Question 1: What is the nature of the career and educational aspirations of potential dropouts and how do they deviate from those of students identified as being likely to complete high school or to attend a post secondary institution?

Research Question 1A: Do the students who are

C

identified as potential dropouts aspire to occupations of lower socioeconomic status than the students in the two remaining groups?

Research Question 1B: Are the students who have been identified by their teachers as potential dropouts less likely to indicate that they will complete high school than the students in the two remaining groups?

Research Question 1C: Are the students who are identified by their teachers as potential dropouts less likely to aspire to obtaining a university education than the students in the two remaining groups?

Occupational Knowledge

Research Question 2: Do the students who are identified as potential dropouts possess less occupational knowledge than those students who are thought to be likely to complete high school or to attend a post secondary institution?

Research Question 2A: Are the students who are identified as potential dropouts less able than their counterparts in the two remaining groups to associate various occupations with descriptions of the activities which these occupations involve?

Research Question 2B: Are the students who are

identified as potential dropouts less able than their peers in the remaining two groups to discriminate between occupations based upon the amount of education or training required for them?

Research Question 2C: Are the students who are identified as potential dropouts less aware than their counterparts in the two remaining groups of the discrepancies in financial gain afforded by various occupations?

Research Question 2D: Are the students who are identified as potential dropouts less able than the students in the two remaining groups to classify occupations on the basis of some common characteristic?

Self-Knowledge and Understanding

Research Question 3: Do the students who are identified as potential dropouts express different feelings and attitudes with respect to themselves and their place in the world of work than those students thought to be likely to complete school or to attend a post secondary institution?

Research Question 3A: Do the students who are identified as potential dropouts possess work values which differ from those held by the students in the two remaining groups?

Research Question 3B: Do the students identified as potential dropouts express more negative feelings than those students in the two remaining groups with respect to their experiences at home, at school, and with peers?

Research Question 3C: Do the combinations of personal strengths and weaknesses communicated by the students who are identified as potential dropouts differ from those communicated by the students in the two remaining groups?

Research Question 4: Which of the variables constituting self-concept as it relates to career development, appear to contribute most significantly to the differences which exist between those students identified as potential dropouts and those who are thought to be likely to complete high school or to attend a post secondary institution?

Limitations

This study was directed toward establishing specific criteria by which the career maturity of children at the elementary school level could be evaluated. Career maturity is influenced by a wide variety of factors and

while the literature has attended to this, the emphasis has been upon the career maturity of adolescents and adults. The questionnaire utilized for the purpose of this research, represented an attempt to assess these influences with respect to the elementary school child. One possible limitation of this study may relate to the inability of this questionnaire to assess all of the variables which influence career maturity at this level.

CHAPTER II

Review of the Literature

This research was aimed primarily at delineating the specific behaviors which constitute career maturity at the elementary school level, with a view to providing a basis for comparing the career development of students at this level who are considered to be potential dropouts with that of students who are considered to be likely to complete school. As a result, this review deals with research literature concerning the characteristics of the dropout, the developmental characteristics of the elementary school child, career development and maturity in the elementary school child, self-concept as it relates to career development, and the use of teacher prediction to identify student outcomes.

Characteristics of the Dropout

The amount of literature which exists with respect to the dropout is vast and it identifies a variety of factors which contribute to the individual's decision to leave school. The phenomenon of school leaving is

thought to be caused by an intricate combination of social, educational, and economic variables (Pawlovich, 1985).

It has been found that individuals who decide to leave school are quite different from their counterparts who decide to remain in school with respect to their social development and interests (Morton-Williams & Finch, 1968). One of the factors which appears to influence this is the quality of the home background from which many dropouts come. It is often a family in which the parents themselves are not well educated and do not encourage high academic aspirations in their children (Gadwa & Griggs, 1985). Dropouts also often come from large households occupied by many children (Pawlovich, 1985). Research has indicated that in such homes, children often do not receive a great deal of stimulation during the early years of development and as a result, come to school with a lower level of readiness than a child coming from a more affluent home (Kaufman, 1968).

Students who leave school early have also been found to be concerned with earning money, starting work as soon as possible, clothing, hairstyles and appearance, being treated as grown up, and having a good time while they are young (Coombs & Cooley, 1968; Morton-Williams &

Finch, 1968).

The attitudes of dropouts toward school have been found to be markedly different from those of students who remain in school. They have been found to have a general lack of interest in school and its curriculum (Pawlovich, 1985; Thornburg, 1975). Dropouts are also often identified as discipline problems and tend to have very negative attitudes toward the authority and structure established within the school (Pawlovich, 1985).

Research indicates that the average dropout is by no means uneducable (Titone, 1982). In fact, it has been found that the majority of dropouts achieve IQ scores that fall within the average range. As such, poor grades and retention patterns may be indicators of a more fundamental inability or unwillingness to do well in an academic setting. Such experiences, however, have a tendency to act as self-fulfilling prophecies, with both the student and his/her teachers coming to feel that he/she is not cut out for school work.

Self-concept is a variable that is mentioned repeatedly with respect to the dropout. It is generally felt that students who decide to leave school do not possess positive concepts of themselves as learners.

The concept of self as a learner is the product of

the complex interaction between an individual's genetically-determined traits and abilities, the environmental circumstances in which that person lives, the expectations placed upon the "student" by society or particular groups in society, the individual's performance in that role, and his/her evaluation of that performance in terms of the expectations of others.

It can be hypothesized that the school dropout experiences role conflict in that his/her concepts of self as a student are not compatible with the externally-established expectations. In an attempt to resolve this conflict, the individual withdraws him/herself from the situation.

Characteristics of the Elementary School Child

Research has provided a great deal of information with respect to the competencies and characteristics of the elementary school child. The elementary school years have been described as a time when children learn the physical skills necessary for play, develop attitudes toward themselves, learn to socialize with peers, acquire fundamental academic skills, become aware of appropriate

sex roles, develop concepts necessary for everyday living, a conscience, morality, and a scale of values, and form attitudes toward social groups and institutions (Havighurst, 1953, as cited in Herr & Cramer, 1988).

Erikson (1950, as cited in Santrock & Yussen, 1987) described the developmental stage through which the elementary school child progresses as the period of industry versus inferiority. At this stage, the child is said to develop industry and learns to win recognition for producing things. He/she comes to know the pleasure of completing a task by steady attention and perseverance. Problems develop with respect to the child's ability to progress through this stage if he/she develops a sense of inadequacy and inferiority.

Cognitively, Piaget (1970, as cited in Santrock & Yussen, 1987) described the elementary school child as being predominantly in the stage of concrete operational thinking or intelligence. At this stage, thinking is highly dependent upon concrete objects and experiences and possibility is subordinate to reality.

Kohlberg (1976, as cited in Santrock & Yussen, 1987) contended that personality and the child's ability to interpret the social world develop within the framework of Piaget's stages of cognitive development. The

elementary school child is therefore seen as being able to categorize his own identity and those of others along a limited number of dimensions. During this stage, he/she moves from a perspective in which all social judgments and styles of interaction are governed by tangible feelings and personal needs, to one in which they are influenced by membership in a particular group, whether it be family, school, community, or culture.

It is the opinion of the author that this particular lifestage is perhaps the most critical in that it provides the foundation for future development. The number of factors which influence development during this period is immense and it would appear that in the case of the dropout, their input is largely negative. It can be suggested therefore, that such individuals are not presented with optimal conditions for growth.

Career Development and the Elementary School Child

Many theorists support the notion that career behavior has its roots in the early years of life and propose that career development is actually a process

which involves a series of decisions made over a period of years (Ginzberg et al., 1951, as cited in Herr & Cramer, 1988). Perhaps the most prominent developmental theory of career decision-making is that proposed by Super (1957, as cited in Herr & Cramer, 1988) which stresses the interaction of personal and environmental variables in career development. He described career choice as the means by which an individual selects occupations which allow him/her to function in a role that is consistent with his/her self-concept.

Super has divided the life span into four developmental stages; growth, expectancy, exploration, and establishment. Each stage consists of increasingly complex tasks which the individual must master before proceeding to the next stage. This study focused primarily upon the individual in the growth stage which encompasses the period of time from birth through the age of fourteen. Herr and Cramer (1988) described the growth stage and its substages, Fantasy, Interest, and Capacity, in the following manner:

Birth.

Self-concept develops through identification with key figures in family and school needs and

fantasy are dominant early in this stage; interest and capacity become more important with increasing social participation and reality testing; learn behaviors associated with self-help, social interaction, self-direction, industriality, goal-setting, persistence.

Fantasy (4-10 years).

Needs are dominant; role playing in fantasy is important.

Interest (11-12 years).

Likes are the major determinant of aspirations and activities.

Capacity (13-14 years).

Abilities are given more weight and job requirements (including training) are considered. (p. 198)

The developmental tasks which present themselves during this life stage have been defined by Super as follows:

1. Developing a picture of the kind of person one is, and
2. Developing an orientation to the world of work and understanding of the meaning of work.

While the existence of career behavior during the elementary school years has been verified, little research has been conducted in an attempt to identify the specific behavioral characteristics which constitute career maturity at this age level. The focus of this study was to investigate self-concept as an aspect of career maturity and to make comparisons between that of potential dropouts and students thought to be likely to complete school. Having accepted the viewpoint of the developmental theorists and gained insight into the negative personal and environmental influences in the lives of school dropouts, it was anticipated by the author that clear differences would be delineated between these groups of students.

Career maturity is a construct which emerges from the developmental theories of career decision-making and refers to the demonstration of age-appropriate behaviors which pertain to identifying, choosing, planning, and executing career goals (Super, 1957, as cited in Herr & Cramer, 1988). The developmental task and the notion that an individual proceeds through a systematic series of stages in career development, form the basis for this construct and permit the measurement of the rate and progress of that sequence by comparison with the norms

established by the individual's age group.

Research has been conducted to identify the specific components of career maturity from adolescence through adulthood (Gribbons & Lohnes, 1968; Super, 1969; Crites, 1974; Jordaan & Heyde, 1979) and assessment instruments have been developed. Herr and Cramer (1988) outline the developmental tasks which span the life stages of exploration and establishment as follows:

- crystallizing a vocational preference,
- specifying it,
- implementing it,
- stabilizing in the chosen vocation,
- consolidating one's status, and
- advancing in the occupation. (p. 195)

Super, Starishevsky, Matlin, and Jordaan (1963, as cited in Herr & Cramer, 1988), identify the specific behaviors and attitudes that promote the crystallization of a vocational preference. These include:

- awareness of a need to crystallize,
- use of resources,
- awareness of factors to consider in-formu-

- lating a vocational preference,
- awareness of contingencies that may affect vocational goals,
 - differentiation of interests and values,
 - awareness of present-future relationships,
 - formulation of a generalized preference,
 - consistency of preference,
 - possession of information on the preferred occupation,
 - planning for the preferred occupation,
 - wisdom of the vocational preference, and
 - specification. (p. 195-199)

With respect to the growth stage, no means by which to assess career-related maturational variables has been developed. For the purpose of this study, the components of career maturity for this age group were extracted from research directed at outlining the career guidance needs of children in the elementary school. Herr and Cramer (1988) suggested that the overall goal of any career guidance program should be to foster career maturity and since the needs of students form the basis for educational programming, those career guidance needs outlined by Henjum, Preyma, and Stargardter (1987) served as the

foundation for the development of the career maturity survey used in this study. These needs were as follows:

- To provide opportunities that enable children to develop positive attitudes towards themselves, and others,
- To provide information and experiences that will link school subjects and school experiences with future life-career choices,
- To provide career information to young children that broadens their awareness, horizons, and aspirations related to future career decisions and plans,
- To provide career exploration activities that help children develop sense of competence, of worth, and of place in society,
- To provide career awareness activities that address the values of respect for the dignity of all work, of pride in accomplishment, and in respect for all individuals regardless of characteristics or occupations,
- To provide information and experiences that minimize sex-role stereotyping, that foster

full gender participation, that generate constructive concepts that boys and girls together are free to consider the fullest range of career aspirations,

- To provide accurate information and experiences to help children analyze and evaluate stereotypical messages about occupational choices, still prevalent in media, printed educational materials, and public institutions,

- To expand children's awareness through experiences with a variety of career role models. These may involve such innovations as using grandparents, senior citizens, and workers from a variety of careers as speakers and school aides,

- To generate the exploration of work values and occupational decisions that are not stereotyped by sex or social class but rather, are based on personal skill and ambition, and

- To provide opportunities to practice and learn problem-solving and decision-making skills related to life-career choices. (p. 113-114)

Variables That Influence Career Development
During the Growth Stage

Self-Concept

The self-concept is the picture that an individual has of him/herself. Through interactions with their environments, children develop sets of attitudes or values which influence their images of themselves or their identities (Mills, 1984; Shavelson, Hubner & Stanton, 1976; Super & Bohn, 1970). The amount and nature of children's early interactions and experiences affect their self-concepts (Calhoun & Morse, 1977). The greater the amount of success children experience during their early developmental period, the more positive the resulting self-perceptions. Children who encounter very little success, such as the school dropout, tend to develop very negative feelings toward themselves.

A major theme of the developmental theories of career behavior is that the choice of an occupation is an explicit statement of one's self-concept. Research has long accepted the fact that self-concept is a significant factor in an adult's career choice, preparation for a career, and participation in the world of work (Super, 1957, as cited in Herr & Cramer, 1988). With respect to

the elementary school child, little research has been done to establish its significance.

According to Super and Bohn (1970), the self-concept theory of career development recognizes the importance of the formation of self-concepts, of their translation into occupational terms, and of their implementation as one becomes established in an appropriate occupation.

The formation process, which was of greatest interest in terms of the particular age group in question in this study, is said to involve an exploration of the self and of the environment. It requires that the individual differentiate him/herself from others but at the same time, identify with those who may serve as models. Also, individuals are required to play certain selected social roles, which may include ethnic, familial, peer-group, educational, and occupational roles, with a more or less conscious attempt being made to evaluate the results. The components of this process relate to the first developmental task of the growth stage of career development which involves developing a picture of the kind of person one is.

Super and Bohn (1970) reported that having mastered this initial task, the individual proceeds to translate the self-concept into occupational terms. They contended

that this translation could occur through one or more of three processes: identification, experience, and observation. Identification describes the process whereby the individual associates him/herself with an adult role model and indicates that he/she is like or wishes to be like that person. Identification involves a global translation as opposed to a consideration of specific traits. Secondly, individuals often discover unsuspected vocational aspects of the self-concept when they obtain experience in working in particular roles to which they have been assigned by chance. Finally, by observing, reading, and hearing things, the individual often learns that particular interests and aptitudes are important in some occupations.

The process of translating the self-concept into occupational terms relates to the second developmental task outlined by Super for the Growth stage of career development, whereby the individual develops an orientation to the world of work and gains some understanding of the meaning of work.

The remaining processes involved in the self-concept theory of career development relate to later life stages and were described by Super and Bohn (1970) in the following manner. The implementation process is that in

which the individual seeks and obtains the specialized education or training required for the occupation to which he/she aspires, or seeks and finds employment in it. Having completed this process, the individual has consolidated his/her concept of self as worker. However, with establishment in the occupation, the realities of the work encountered may dictate modifications or adjustments to the self-concept. Such modifications are particularly necessary during the years of decline when drastic changes occur with respect to capacities and role expectations.

The final process is that of the preservation of the self-concept which characterizes the Maintenance stage of career development. At this time, the established individual attempts to maintain equilibrium despite occupational change or the decrease in personal drive and energy.

For the purpose of this study, the author has chosen to describe the decision to drop out of school as a vocational one. Therefore, from the point of view of Super's self-concept theory of career development, it must be hypothesized that the processes of the formation and implementation of the self-concepts of students who decide to leave school are fundamentally different from

those of students who elect to remain in school and pursue post secondary education.

With respect to the elementary school children who constituted the sample in this study, the aspects of self-concept which appear to be most closely related to career development and the roles to be played at this stage are self as a social being and self as a learner. Super (1980) reported that success in playing one role or in progressing through one stage of career development would facilitate success in those which follow while difficulties experienced in one would precipitate difficulties in others.

Having already considered the negative influences in the lives of school dropouts, it would be anticipated that they would experience conflict in progressing through the life stages which would negatively affect their self-perceptions and hence their career development.

Environmental Influences

Research indicates that there are a wide variety of factors external to the child which influence his/her career development. One of these factors is the place of residence of the child. Rich (1979) has found that

children are most knowledgeable about occupations to which they are exposed in their own community. She maintains that children who live in rural settings are at a distinct disadvantage because fewer occupational role models are available to them and those that are available are often of low status. This point is of particular interest regarding the school dropout, as research has indicated that more students who live in rural areas tend to leave school than do those who live in urban centers (Leaving Early, 1984).

A second environmental factor which has been found to influence career development in childhood is socioeconomic status. Holland (1981) found that socioeconomic status is a more powerful predictor of career maturity than self-concept, race, sex, place of residence, and age. In discussing the influence of family socioeconomic status upon the child's career maturity, one must consider its components which include parents' educational backgrounds as well as their occupations. These factors have also been found to be closely related to dropping out (Schulenberg, Vondracek, & Crouter, 1984; Rumberger, 1983).

Parental attitudes toward work and parent-child relationships are seen to be influential with respect to

the career attitudes of children. Miller (1978) examined childhood antecedents to career maturity attitudes in young adulthood and found that parental attitudes and behavior reported as having occurred in childhood were positively related with career maturity attitudes among college students.

Berry (1979) contended that many problems experienced by older children, youth, and adults are the result of unresolved communication problems which occur during childhood. It is through early interactions in the home that the child begins to develop a self-concept and it has been recognized that parents are the primary source of a child's self-concept (Strom & Bernard, 1982, as cited in Maples, 1984). If the interaction between the parent and child is unsatisfactory, the development of self-concept is adversely affected. Berry (1979) further contended that such communication problems also extend to affect the child's interactions with others in school and subsequently, in the work place.

Parental attitudes have also been linked with a child's decision to leave or to remain in school. The home environment of the typical school dropout has been described as one in which he/she receives little parental time and support (Schulenberg et al., 1984), parents do

not encourage high educational and occupational aspirations (Beck & Muia, 1980), or maintain effective channels of communication (Cervantes, 1965).

It would appear that many of the factors which influence career development in childhood also influence a child's decision to drop out of school. As career development refers to the process of life-planning, the decision to leave or to remain in school can be seen as one of the many decisions to be made on the way to vocational choice.

Children's Values Toward Work

One might argue that the elementary school years are too early to be concerned with career development. Research has indicated that children at the elementary school level have already established perceptions and preferences with respect to the world of work. Parker (1970) found that in a sample of 29,000 grade seven students, fewer than ten percent described themselves as not having established some career goals.

Creason and Schilson (1970) found that within a sample of 121 sixth grade students, all of them indicated that they had established some career plans and career preferences and only eight could not provide some reason

as to why they had made their choices.

Nelson (1963) found that as early as the age of eight, children have well-developed ideas regarding occupations and levels of education and tend to reject some occupations as holding no interest for them.

Finally, Hales and Fenner (1972) have reported research findings indicating that values related to work begin to form in childhood.

Teacher Prediction as a Means of Identifying Student Outcomes

The act of teaching appears to be largely a decision-making process. Each day, teachers are presented with a large amount of data about their students from a variety of sources including their own observations, anecdotal reports of other teachers, standardized test scores, and school records. To handle this flood of information, teachers must integrate it into judgements about their students' cognitive, affective, and behavioral conditions (Morine-Dershimer, 1978-79). These judgements are then used to make pedagogical decisions (Shavelson, 1976). According to Shavelson and Stern

(1981), one must assume that teachers are rational professionals who must make such judgements in an uncertain and complex environment but do so in the best interest of their students.

For the purpose of this study, teacher prediction was used as the means by which potential dropouts were identified. Each teacher participating in the study was asked to indicate whether they felt each of their pupils would be likely to drop out of school, complete high school, or attend a post secondary institution, based upon the knowledge they had accumulated, after having worked with that individual for at least nine months. As the bulk of research dealing with the dropout phenomenon has involved subjects who have already left school, little has been written with respect to the identification of potential dropouts and of the means which have been utilized, none have been validated.

Teacher judgements have been used in a variety of other areas of education and in some cases, have been found to be very accurate. For example, Shavelson, Cadwell, and Izu (1977) reviewed research relating to teachers' judgements of their students' abilities and found evidence of their accuracy. Morine-Dershimer (1978-79) also found evidence that teachers' predictions

of students' success in reading were quite valid.

Teacher nominations have also been used to identify child behavior problems. Green, Beck, Forehand, and Vosk (1980) found evidence to support the validity of teachers' judgements of problem children. Teachers participating in the study were asked to classify each of their students as being normal, a conduct problem, or a withdrawal problem. These classifications were then compared with the results of sociometric measures, behavioral observations, and academic scores and were found to be accurate.

Summary

It would appear that the elementary school years constitute a critical period of human development. It is during this time that the individual, in response to a host of biological and environment circumstances, forms important attitudes and perceptions and establishes a foundation for future growth. As a consequence, the role of the school, with respect to influencing the development of the child, is an important one. The nature of his/her school experiences appear to have long-term

effects, whether positive or negative.

The focus of this study was to investigate the development of career behavior during this particular life stage and to compare that of students thought to be "at risk" of dropping out with that of students thought to be likely to remain in school. As discussed in this chapter, existing research has identified the following factors as being influential with respect to career development in childhood: self-concept, place of residence, socioeconomic status, parental attitudes toward work, and parent-child relationships.

An examination of the factors associated with career development and with dropping out, suggest a great deal of overlap. As a result, it was hypothesized that the self-concepts and therefore patterns career development of potential dropouts would be different from those of their peers who were thought to be likely to complete school. Such differences were anticipated as a result of the negative influences surrounding the potential dropout.

CHAPTER III


Methodology

This chapter will present the data collection procedures and instrumentation used in this study.

Procedures

The data required for this investigation was collected by means of a survey-type questionnaire designed to determine the developmental standards which exist among Newfoundland elementary school children with respect to their career development. The aspect of career development which was of greatest importance in this study was the self-concept, as defined in Chapter I. A teacher prediction checklist was also used in an attempt to have teachers indicate what they felt the academic future of each of their students would be.

The questionnaire was administered to grade three and grade six students from schools which were situated in both urban and rural settings.



The Sample

The sample for this study consisted of one hundred eighty-nine elementary school students from one urban and two rural schools in the province.

The instrument was administered to students in grade three and six classes in the schools surveyed. These grade levels were chosen because they constituted the upper and lower extremes of the age group in question and facilitated an investigation of the developmental changes which occur between these two age points. A breakdown of the final sample by grade, sex, and place of residence is shown in Table 1.

The Instruments

A student questionnaire and a teacher prediction checklist were used to collect the data for this investigation. The student questionnaire was entitled "Career Maturity Survey" and the instrument for teachers was entitled "Teacher Prediction Checklist". Copies of these instruments are enclosed as Appendices A and B.

Table 1
Sample Size

Place of Residence	Sex	Grade		Totals
		3	6	
Urban	Female	22	20	42
	Male	21	26	47
Rural	Female	20	29	49
	Male	23	28	51
Sub-Total	Female	42	49	91
	Male	44	54	98
Total		86	103	189

Career Maturity Survey

The Career Maturity Survey was developed for the purpose of this study and consisted of twenty-six questions which were aimed at delineating the developmental standards which exist among elementary school children with respect to their career development.

The construct career maturity is founded upon the

notion that individuals progress through a systematic series of stages in career development and throughout each, must master certain tasks. As already stated in Chapter II, research has not yet attempted to define the specific behavioral components which constitute career maturity in young children as has been done for adolescents and adults.

The Career Maturity Survey was developed after careful consideration of the developmental tasks for the Growth Stage of career development, as outlined by Super and the existing literature concerning career development programs for elementary school children, the goal of which was to foster career maturity. The author, in consultation with one other graduate student and a professor, selected the questionnaire items based upon the information gleaned from these sources.

Questions were asked regarding family background. These included items relating to family size, whether or not both parents were present in the home, whether or not the mother was employed outside the home, and the father's occupation. The fathers' occupations were coded on the basis of socioeconomic status using the revised socioeconomic index for occupations in Canada (Blishen & McRoberts, 1976). Questionnaire items were also directed

at obtaining information on the following: the students' levels of occupational knowledge, their occupational and educational aspirations, work values, occupational role models, decision-making abilities, self-concepts, and the degree of sex-role stereotyping with respect to the world of work.

The questionnaire was piloted with one grade three and one grade six class prior to the actual data collection. As a result of the pilot, adjustments were made to both the questionnaire and the administration procedure.

Teacher Prediction Checklist

The Teacher Prediction Checklist was also developed for the purpose of this study and required teachers to speculate on the academic future of each student completing the survey. Based upon their knowledge of the students, the teachers were asked to indicate whether they felt each student would be likely not to complete high school, to complete high school, or to attend a post secondary institution.

Method of Data Collection

The surveys were administered to eight separate groups of students over a four day period. The total

student time involved in completing the survey was found to vary greatly depending upon the grade level to which it was being administered and it ranged from one to two hours.

The author and another graduate student administered the surveys and led the students through each item.

Confidentiality

In order to protect student anonymity, students were given identification numbers based upon the seating arrangement in the classroom. As the students worked on the surveys, teachers completed the prediction checklist utilizing the same numbering system.

Preparation for Analysis

After the data had been collected, the surveys were analyzed to assess patterns of student responses and to develop a coding scheme. Coding was completed by the researcher to ensure consistency.

Self-Concept As It Relates to Career Development

The focus of this study was to determine whether or not differences existed between the self-concepts and therefore, patterns of career development of students

identified as potential dropouts and those thought to be likely to complete high school or to attend a post secondary institution.

As already stated, self-concept refers to the picture that an individual has of him/herself. It is the result of a complex interaction of personal and situational determinants, the opportunity to play various roles, and the evaluations of the degree to which the results of the role playing meet with the approval of superiors and peers (Super, 1953, as cited in Herr & Cramer, 1988).

This study was concerned specifically with the elementary school child who is in the process of formulating a self-concept and laying the foundation for its translation into occupational terms. During this Growth stage of career development, the elements of the self which are of greatest importance are the self as a social being, the self as a learner, as well as the self as a future worker. As a result, the following variables were assessed in an attempt to provide information regarding the nature of the students' perceptions of their social relationships, performance in school, and orientation to the world of work.

Career aspirations.

Students were asked to indicate what kind of job they would like to do in the future. The career choices were coded on the basis of socioeconomic status using the revised socioeconomic index for occupations in Canada (Blishen & McRoberts, 1976) and compared across the three groups of students.

Educational aspirations

Students were asked to reflect upon their academic futures and to indicate whether or not they would complete high school and whether or not they would attend university or some other post secondary institution. Again, the responses of the three groups of students were compared.

Occupational Knowledge

A comparison of student responses was made with respect to their ability to identify the roles played by individuals in various occupations, the educational requirements of different occupations, and their ability to categorize occupations on the basis of a common element.

Work Values

An assessment was made of the students' beliefs and attitudes about work and its purpose.

Self-Knowledge

Students' perceptions of their strengths and weaknesses and feelings about themselves and significant others were compared.

Statistical Analysis

The analysis consisted of crosstabulating the variables constituting self-concept as it relates to career development with the students' predicted academic futures and using chi-square analysis to reject the null hypothesis at the .05 level of significance.

In some cases, interpretations were made based upon the percentages of responses given by each of the three groups to an item. However, while clear differences were indicated, statistical significance was not established by the chi-square. Such relationships should be viewed with some caution.

CHAPTER IV

Analysis of the Research Questions

In this chapter, an analysis of the data collected using the instruments described in Chapter III will be presented. This analysis was performed in an attempt to answer the research questions proposed in Chapter I. Also presented in this chapter are several tables containing data collected in this study concerning the demographic and sociological variables which have been related to the dropout phenomenon by previous research and which were discussed in Chapter II.

Research Question 1

What is the nature of the career and educational aspirations of potential dropouts and how do they deviate from those of students identified as being likely to complete high school or to attend a post secondary institution?

An assessment of the variables related to career and educational expectations and aspirations indicated that differences did exist between the three groups of students identified. These variables will be outlined as they pertain to the three research questions related to

question one.

Research Question 1A

Do the students who are identified as potential dropouts aspire to occupations of lower socioeconomic status than the students in the two remaining groups?

The occupations to which the students aspired were coded on the basis of socioeconomic status by using the revised socioeconomic index for occupations in Canada (Blishen & McRoberts, 1976). The indices corresponding to the career choices made by the students were then placed in three separate categories indicating the lower, middle, and higher levels of socioeconomic status afforded by these occupations.

It was found that the students who were identified as potential dropouts aspired more frequently to occupations in the lower status group which corresponded to socioeconomic indices of 22.2 - 38.2, as compared with 40.5 - 57.2 for the middle level occupations and 60.1 - 74.3 for those at the highest level. Students who were identified as being likely to complete high school aspired marginally more frequently to the middle level occupations, while those thought to be likely to attend a post secondary institution aspired most frequently to

occupations which would place them in a high socioeconomic bracket.

Although these differences between the career aspirations and expectations of the three groups of students were clearly outlined, the chi-square did not indicate a significant relationship between them and the students' predicted academic futures.

Table 2

Crosstabulation of the Predicted Academic Futures of Students by Socioeconomic Status of Career Aspirations

Socioeconomic Indices of Career Aspirations	Groups of Students as Identified by Teachers					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
22.2 - 38.2	9	18.0	7	11.3	6	7.8
40.5 - 57.2	24	48.0	31	50.0	37	48.1
60.1 - 74.3	16	32.0	22	35.5	34	44.2
Uncodable Responses	1	2.0	2	3.2	0	0.0

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

Research Question 1B

Are the students who have been identified by their teachers as potential dropouts less likely to indicate that they will complete high school than the students in the two remaining groups?

It was found that although the majority of the students in all of the groups within the sample felt that they would complete high school, the greatest number of those who said they would not, were those who were identified by their teachers as potential dropouts.

A small percentage of the students who were identified as being likely to complete high school indicated that they believed they would not, while all of those thought to be likely to attend a post secondary institution felt that they would complete high school.

In this case, the chi-square showed a significant relationship between teacher predictions and the students' own perceptions of their likelihood of completing or not completing high school.

Research Question 1C

Are the students who are identified by their teachers as potential dropouts less likely to aspire to obtaining a university education than the students in the

two remaining groups?

When asked whether or not they thought they would attend university, the majority of the students indicated that they felt they would. Although the number of affirmative responses was higher than anticipated, they followed the pattern expected by the author in that the students who were identified as potential dropouts indicated least frequently that they would attend university.

The chi-square showed a significant relationship between teacher predictions and the students' own perceptions of their likelihood of attending or not attending university.

Research Question 2

Do the students who are identified as potential dropouts possess less occupational knowledge than those students who are thought to be likely to complete high school or to attend a post secondary institution?

As assessment of the variables related to occupational knowledge showed that differences did exist between the three groups of students identified. These variables will be outlined as they pertain to the four research questions in this area.

Table 3

Crosstabulation of the Predicted Academic Futures of Students by the Educational Aspirations of Students

<u>Groups of Students as Identified by Teachers</u>								
Educational	Variable	PD		HSG		PSA		Chi-
Aspiration	Category	No.	%	No.	%	No.	%	Square
Will complete high school*	Yes	40	80.0	61	98.4	77	100.0	22.58
	No	9	18.0	1	1.6	0	0.0	
	Omitted	1	2.0	0	0.0	0	0.0	
Will attend university*	Yes	32	64.0	51	82.3	69	89.6	9.07
	No	15	30.0	11	17.7	8	10.4	
	Omitted	3	6.0	0	0.0	0	0.0	

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

*Chi-square significant at .05 level

Research Question 2A

Are the students who are identified as potential dropouts less able than their counterparts in the two remaining groups to associate various occupations with descriptions of the activities which these occupations involve?

It was found that those students identified as potential dropouts and those thought to be likely to complete high school demonstrated equal competence with respect to this question. On all but one item, the identification of the role of the nurse, the students identified as being likely to attend a post secondary institution obtained the highest number of correct responses. On this item, it was the potential dropouts who obtained the greatest number of correct responses.

The overall results indicate that the students who are identified as potential dropouts possess a level of occupational knowledge in this area which is equivalent to that of the students who are thought to be likely to complete high school. Those students identified as being likely to attend a post secondary institution exhibited a greater degree of competence in this area than either of the other groups.

Research Question 2B

Are the students who are identified as potential dropouts less able than their peers in the remaining two groups to discriminate between various occupations based upon the amount of education or training required for them?

With respect to this occupational knowledge item, the group that performed most poorly was that of the students thought to be likely to complete high school. The students who are identified as potential dropouts performed marginally better, while those thought to be likely to attend a post secondary institution obtained the greatest percentage of correct responses.

It would appear that the students identified as potential dropouts do not possess significantly less knowledge than the students in the remaining two groups with respect to the educational requirements of various occupations.

The chi-square did not indicate a significant relationship between the students' predicted academic futures and the possession of this aspect of occupational knowledge.

Table 4

Crosstabulation of the Predicted Academic Futures of Students by the Ability to Match Job Titles with Job Descriptions

Job Title	Variable Category	Groups of Students as Identified by Teachers						Chi-Square
		PD		HSG		PSA		
		No.	%	No.	%	No.	%	
Air Traffic Controller	Correct	49	98.0	59	95.2	76	98.7	1.78
	Incorrect	1	2.0	3	4.8	1	1.3	
Accountant	Correct	40	80.0	50	80.6	70	90.9	3.92
	Incorrect	10	20.0	12	19.4	7	9.1	
Lawyer*	Correct	40	80.0	49	79.0	75	97.4	12.81
	Incorrect	10	20.0	13	21.0	2	2.6	
Nurse	Correct	50	100.0	59	95.2	76	98.7	3.55
	Incorrect	0	0.0	3	4.8	1	1.3	
Architect*	Correct	37	74.0	50	80.6	71	92.2	7.92
	Incorrect	13	26.0	12	19.4	6	7.8	
Pharmacist	Correct	47	94.0	59	95.2	75	97.4	0.95
	Incorrect	3	6.0	3	4.8	2	2.6	

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

*Chi-square significant at .05 level

Table 5

Crosstabulation of the Predicted Academic Futures of Students by
Knowledge of the Educational Requirements of Occupations

Knowledge of Educational Requirements	Variable Category	<u>Groups of Students as Identified by Teachers</u>					
		PD		HSG		PSA	
		No.	%	No.	%	No.	%
Requirements	Correct	26	52.0	31	50.0	52	67.5
	Incorrect	24	48.0	31	50.0	25	32.5

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

Research Question 2C

Are the students who are identified as potential dropouts less aware than their counterparts in the two remaining groups of the discrepancies in financial gain afforded by various occupations?

While all three groups performed poorly on this particular item, it was observed that the students who were identified as potential dropouts responded incorrectly more frequently than the students in either of the two remaining

groups. In this area, the students who were identified as being likely to attend a post secondary institution exhibited the greatest competence.

It would appear from the results that the students identified as potential dropouts are less aware than their counterparts of the financial disparity which exists between people in different occupations.

The chi-square did not indicate a significant relationship between the students' predicted academic futures and the presence of this particular aspect of occupational knowledge.

Table 6

Crosstabulation of the Predicted Academic Futures of Students by Knowledge of Differences in Earnings

		<u>Groups of Students as Identified by Teachers</u>					
Knowledge of	Variable	PD		HSG		PSA	
	Category	No.	%	No.	%	No.	%
<hr/>							
Differences							
in Earnings	Correct	11	22.0	20	32.3	31	40.3
	Incorrect	39	78.0	42	67.7	46	59.7

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

Research Question 2D

Are the students who are identified as potential dropouts less able than the students in the two remaining groups to classify occupations on the basis of some common characteristic?

It was discovered that in two of the three categories, jobs which involve danger and adventure and jobs which involve working outside, marginally greater percentages of students identified as potential dropouts were able to provide examples of jobs which correctly matched the classification. The third category, jobs which involve helping people with their problems from home and school, received a greater number of correct responses from students thought to be likely to attend a post secondary institution. The group which consistently responded with the greatest number of incorrect answers was those students thought to be likely to complete high school.

It would appear that the students identified as potential dropouts possess a level of occupational knowledge, in this area, which is equivalent to that of the students in the two remaining groups.

The chi-square values for each of these categories did not suggest a significant relationship between this

aspect of occupational knowledge and the students' predicted academic futures.

Research Question 3

Do the students who are identified as potential dropouts express different feelings and attitudes with respect to themselves and their place in the world of work than those students thought to be likely to complete school or to attend a post secondary institution?

As assessment of the variables related to self-knowledge and understanding showed that differences did exist between the three groups of students identified. Some of these variables were discovered to have a significant level of association with the teachers' predictions of the students' academic futures. These variables will be outlined as they pertain to the three research questions related to question three.

Research Questions 3A

Do the students who are identified as potential dropouts possess work values which differ from those held by the students in the two remaining groups?

It was discovered that in all eight of the statements presented to the students regarding the world

Table 7

Crosstabulation of the Predicted Academic Futures of Students by
Ability to Classify Occupations

Classifica- tion of Occupations	Variable Category	Groups of Students as Identified by Teachers					
		PD		HSG		PSA	
		No.	%	No.	%	No.	%
Jobs that involve helping others.	Correct	36	72.0	37	59.7	58	75.3
	Incorrect	13	26.0	25	40.3	18	23.4
	Omitted	1	2.0	0	0.0	1	1.3
Jobs that involve danger or adventure.	Correct	44	88.0	53	85.5	67	87.0
	Incorrect	5	10.0	9	14.5	10	13.0
	Omitted	1	2.0	0	0.0	0	0.0
Jobs that involve working outdoors.	Correct	39	78.0	47	75.8	60	77.9
	Incorrect	11	22.0	15	24.2	16	20.8
	Omitted	0	0.0	0	0.0	1	1.3

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

of work, those who were identified as potential dropouts consistently supplied responses which point to the negative perceptions which they hold with respect to themselves and the world of work.

These students indicated more often than others that they did not look forward to going to work, that work was boring, that certain jobs are of little or no importance, that others know what is best for them, that luck is the most important factor involved in obtaining a good job, that there can only be one occupation for each person, that work is much like going to school, and that effort alone will not help them to achieve what they want with respect to the world of work.

The results showed clearly that those students who were identified as potential dropouts have formed values and opinions which would appear to limit their vocational development. However, chi-square values which indicated a significant relationship with the students' predicted academic futures resulted for only three of the eight statements included in this particular questionnaire item. These statements were (a) I guess everybody has to go to work but I don't look forward to going to work, (b) Work is boring, and (c) If you get a good job it is because you are lucky.

It was interesting to note that when asked to select the kinds of things with which they hoped a job would provide them, those students who were identified as potential dropouts and those thought to be likely to complete high school most frequently opted for more depersonalized choices. For example, these students appeared to be primarily concerned with finding jobs which would meet their basic needs by providing financial security. The students who were identified as being likely to attend a post secondary institution, on the other hand, seemed to be interested in finding jobs that would meet higher level needs and provide them with happiness and personal satisfaction.

The chi-square indicated a significant relationship between the students' predicted academic futures and these particular work values.

Research Question 3B

Do the students identified as potential dropouts express more negative feelings than those students in the two remaining groups with respect to their experiences at home, at school, and with peers?

It was revealed that with respect to all twelve of the statements presented, the students who were ident-

Table 8

Crosstabulation of Predicted Academic Futures of Students by Work Values

Statement	Variable Category	Groups of Students as Identified by Teachers						Chi-Square
		PD		HSG		PSA		
		No.	%	No.	%	No.	%	
I guess everybody has to go to work but I don't look forward to going to work.*	True	12	24.0	7	11.3	3	3.9	11.92
	False	38	76.0	55	88.7	74	96.1	
	Omitted	0	0.0	0	0.0	0	0.0	
All jobs are important.	True	43	86.0	56	90.3	70	90.9	2.72
	False	7	14.0	6	9.7	6	7.8	
	Omitted	0	0.0	0	0.0	1	1.3	
You can do any kind of work you want to as long as you try hard.	True	39	78.0	56	90.3	69	89.6	4.57
	False	11	22.0	6	9.7	8	10.4	
	Omitted	0	0.0	0	0.0	0	0.0	
Your parents probably know better than anyone else which job you should enter.	True	23	46.0	24	38.7	22	28.6	5.38
	False	26	52.0	38	61.3	54	70.1	
	Omitted	1	2.0	0	0.0	1	1.3	

(table continues)

Statement	Variable Category	Groups of Students as Identified by Teachers						Chi- Square
		PD		HSG		PSA		
		No.	%	No.	%	No.	%	
Work is boring*	True	11	22.0	7	11.3	5	6.5	6.89
	False	39	78.0	55	88.7	72	93.5	
	Omitted	0	0.0	0	0.0	0	0.0	
Work is much like going to school.	True	40	80.0	47	75.8	57	74.0	0.60
	False	10	20.0	15	24.2	20	26.0	
	Omitted	0	0.0	0	0.0	0	0.0	
There is only one occupation for each person.	True	14	28.0	7	11.3	13	16.9	5.35
	False	36	72.0	55	88.7	64	83.1	
	Omitted	0	0.0	0	0.0	0	0.0	
If you get a good job, it is because you are lucky.*	True	28	56.0	22	35.5	19	24.7	12.87
	False	22	44.0	40	64.5	58	75.3	
	Omitted	0	0.0	0	0.0	0	0.0	

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

*Chi-square significant at .05 level.

Table 9

Crosstabulation of Predicted Academic Futures of Students by Characteristics of Occupations Valued by Students

Categories of Job Characteristics Valued by Students*	<u>Groups of Students as Identified by Teachers</u>						Chi-Square
	PD		HSG		PSA		
	No.	%	No.	%	No.	%	
Financial Security	27	54.0	36	58.1	26	33.8	47.32
Personal Satisfaction	23	46.0	25	41.9	51	66.2	

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

*Chi-square significant at .05 level.

ified as potential dropouts expressed the most negative feelings. The students who were identified as being likely to attend a post secondary institution generally expressed the most positive feelings except in response to three items on which the identified high school graduates occupied the most favourable position.

Although these differences between the groups were clearly delineated, the chi-square indicated a significant relationship between the students' predicted academic futures and only six of the twelve statements included in this questionnaire item. These statements were (a) My parents are interested in the things I do,

(b) I would like to drop out of school, (c) School work is fairly easy for me, (d) I am proud of my school work, (e) I get along well with other children, and (f) My family and I have a lot of fun together.

On the six remaining statements, the identified potential dropouts also provided more negative responses but the chi-square did not indicate a significant relationship. These statements were (a) I am a good person, (b) I have many friends, (c) I am a very happy person, (d) I am among the last to be chosen for teams, (e) I can usually figure out difficult things, and (f) My family listens to me.

These findings suggest that the students who were identified as potential dropouts experience feelings of isolation. Through these statements, these students have expressed feelings of failure with respect to all of the aspects of life which are considered to be most important at this stage; home, school, and peer relationships.

Research Question 3C

Do the combinations of personal strengths and weaknesses communicated by the students who are identified as potential dropouts differ from those communicated by the students in the two remaining groups?

Table 10

Crosstabulation of Predicted Academic Futures of Students by Self-Concept

<u>Groups of Students as Identified by Teachers</u>								
Statement	Variable Category	PD		HSG		PSA		Chi-Square
		No.	%	No.	%	No.	%	
My parents are interested in the things I do.*	True	43	86.0	53	85.5	73	94.8	6.37
	False	7	14.0	8	12.9	2	2.6	
	Omitted	0	0.0	1	1.6	2	2.6	
I would like to drop out of school.*	True	10	20.0	3	4.8	2	2.6	15.13
	False	40	80.0	59	95.2	74	96.1	
	Omitted	0	0.0	0	0.0	1	1.3	
I am a good person.	True	43	86.0	58	93.5	67	87.0	2.25
	False	6	12.0	3	4.8	8	10.4	
	Omitted	1	2.0	1	1.6	2	2.6	
I have many friends.	True	42	84.0	58	93.5	74	96.1	7.38
	False	7	14.0	4	6.5	2	2.6	
	Omitted	1	2.0	0	0.0	1	2.0	
I am a very happy person.	True	38	76.0	57	91.9	68	88.3	7.51
	False	11	22.0	4	6.5	7	9.1	
	Omitted	1	2.0	1	1.6	2	2.6	
I am among the last to be chosen for teams.	True	16	32.0	14	22.6	13	16.9	5.26
	False	34	68.0	48	77.4	63	81.8	
	Omitted	0	0.0	0	0.0	1	1.3	

(table continues)

Groups of Students as Identified by Teachers								
Statement	Variable Category	PD		HSG		PSA		Chi-Square
		No.	%	No.	%	No.	%	
I can usually figure out difficult things.	True	30	60.0	42	67.6	58	75.3	5.39
	False	19	38.0	20	32.3	17	22.1	
	Omitted	1	2.0	0	0.0	2	2.6	
School work is easy for me.*	True	22	44.0	42	67.7	65	84.4	25.28
	False	26	52.0	20	32.3	10	13.0	
	Omitted	2	4.0	0	0.0	2	2.6	
I am proud of my school work.*	True	31	62.0	52	83.9	1	88.3	13.98
	False	17	34.0	9	14.5	68	10.4	
	Omitted	2	4.0	1	1.6	8	1.3	
I get along well with other children.*	True	36	72.0	57	91.9	73	94.8	16.96
	False	12	24.0	5	8.1	3	3.9	
	Omitted	2	4.0	0	0.0	1	1.3	
My family listens to me.	True	34	68.0	46	74.2	67	87.0	7.06
	False	14	28.0	14	22.6	9	11.7	
	Omitted	2	4.0	2	3.2	1	1.3	
My family and I have a lot of fun together.*	True	37	74.0	57	91.9	69	89.6	11.07
	False	13	26.0	5	8.1	7	9.1	
	Omitted	0	0.0	0	0.0	1	1.3	

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

*Chi-square significant at .05 level.

When asked to identify two personal strengths, it was interesting to note that the students who were identified as being likely to complete high school concentrated most frequently upon tasks of an academic nature while those identified as potential dropouts concentrated upon tasks which did not relate to academics. The students thought to be likely to attend a post secondary institution most often provided responses which included one academic and one non-academic task.

With respect to the weaknesses, the students identified as being likely to complete high school chose school-related tasks most frequently and those thought to be likely to attend a post secondary institution chose those tasks which were of a non-academic nature. In this case, more identified potential dropouts provided responses which included one academic and one non-academic task.

The chi-square did not indicate a significant relationship between the students' perceived strengths and weaknesses and their predicted academic futures.

Research Question 4

Which of the variables constituting self-concept as it relates to career development appear to contribute

most significantly to the differences which exist between those students identified as potential dropouts and those who are thought to be likely to complete high school or to attend a post secondary institution?

Table 11

Crosstabulation of the Predicted Academic Futures of Students by Students' Perceived Strengths

Combinations of Strengths	Groups of Students as Identified by Teachers					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
One Academic	0	0.0	1	1.6	1	1.3
One Non-Academic	3	6.0	1	1.6	0	0.0
Two Academic	3	6.0	5	8.1	4	5.2
Two Non-Academic	35	70.0	42	67.7	46	59.7
One Academic/One Non-Academic	9	18.0	13	21.0	26	33.8
Omitted	0	0.0	0	0.0	0	0.0

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

An assessment of the variables constituting self-concept as it relates to career development indicated that those which were affective in nature contributed most significantly to the differences observed between the three groups of students identified.

Table 12

Crosstabulation of the Predicted Academic Futures of Students by Students' Perceived Weaknesses

Combinations of Weaknesses	Groups of Students as Identified by Teachers					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
One Academic	1	2.0	2	3.2	2	2.6
One Non-Academic	2	4.0	1	1.6	6	7.8
Two Academic	10	20.0	16	25.8	7	9.1
Two Non-Academic	23	46.0	26	41.9	37	48.1
One Academic/One Non-Academic	14	28.0	15	24.2	20	26.0
Omitted	0	0.0	2	3.2	5	6.5

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

It was found that the identified potential dropouts expressed more negative feelings with respect to themselves and their likelihood for success than did the students in the two remaining groups. On the aspects of vocational self-concept such as occupational knowledge, which simply required that students provide factual information, there appeared to be little difference between the groups of students and the identified potential dropouts performed as well as the other students in this area.

As already stated, research has identified a variety of sociological and demographic variables which appear to relate to the dropout phenomenon. The following tables depict the results of the crosstabulations between these variables and the predicted academic futures of the subjects in this study.

Table 13

Crosstabulation of Predicted Academic Futures of Students
by Sex

Sex	<u>Groups of Students as Identified by Teachers</u>					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
Male	30	60.0	34	54.8	34	44.2
Female	20	40.0	28	45.2	43	55.8

PD = Potential Dropouts, HSG = High School Graduates,
PSA = Post Secondary Attenders

Table 14

Crosstabulation of Predicted Academic Futures of Students
by Grade

Grade	<u>Groups of Students as Identified by Teachers</u>					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
3	22	44.0	35	56.5	29	37.7
6	28	46.0	27	43.5	48	62.3

PD = Potential Dropouts, HSG = High School Graduates,
PSA = Post Secondary Attenders

Table 15

Crosstabulation of Predicted Academic Futures of Students
by Age in Grade 3

Age in Grade 3	<u>Groups of Students as Identified by Teachers</u>					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
8	11	25.0	15	34.1	18	40.9
9	8	21.1	19	50.0	11	28.9
10	2	66.7	1	33.3	0	0.0
11	1	100.0	0	0.0	0	0.0

PD = Potential Dropouts, HSG = High School Graduates,
PSA = Post Secondary Attenders

Table 16

Crosstabulation of Predicted Academic Futures of Students
by Age in Grade 6

Age in Grade 6	<u>Groups of Students as Identified by Teachers</u>					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
11	11	20.0	19	34.5	25	45.5
12	9	23.7	7	18.4	22	57.9
13	6	75.0	1	12.5	1	12.5
14	2	100.0	0	0.0	0	0.0

PD = Potential Dropouts, HSG = High School Graduates,
PSA = Post Secondary Attenders

Table 17

Crosstabulation of Predicted Academic Futures of Students
by Place of Residence

Place of Residence	<u>Groups of Students as Identified by Teachers</u>					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
Urban	15	30.0	35	56.4	39	50.6
Rural	35	70.0	27	43.5	38	49.4

PD = Potential Dropouts, HSG = High School Graduates,
PSA = Post Secondary Attenders

Table 18

Crosstabulation of Predicted Academic Futures of Students
by Socioeconomic Status of Father's Occupation

Socioeconomic Status of Father's Occupation	<u>Groups of Students as Identified by Teachers</u>					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
Unemployed	4	8.0	5	8.1	0	0.0
Low Status	33	66.0	28	45.2	31	40.3
Middle Status	6	12.0	13	21.0	30	39.0
High Status	0	0.0	1	1.6	4	5.2
Uncodeable	7	14.0	15	24.2	12	15.6
Responses						

PD = Potential Dropouts, HSG = High School Graduates,
PSA = Post Secondary Attenders

Table 19

Crosstabulation of Predicted Academic Futures of Students
by Number of Children in Family

Number of Children in Family	<u>Groups of Students as Identified by Teachers</u>					
	PD		HSG		PSA	
	No.	%	No.	%	No.	%
1 - 2	18	36.0	22	35.5	39	50.6
3 - 4	18	36.0	34	54.8	33	42.9
More than 4	14	28.0	6	9.7	5	6.5

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

Table 20

Crosstabulation of Predicted Academic Futures of Students by Presence of Mother

Variable Category	Groups of Students as Identified by Teachers							
	PD		HSG		PSA			
	No.	%	No.	%	No.	%		
Mother Present	Yes	50	100.0	62	0.0	76	98.7	
	No	0	0.0	0	0.0	1	1.3	
	Omitted	0	0.0	0	0.0	0	0.0	

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

Table 21

Crosstabulation of Predicted Academic Futures of Students by Presence of Father

Variable Category	Groups of Students as Identified by Teachers							
	PD		HSG		PSA			
	No.	%	No.	%	No.	%		
Father Present	Yes	46	92.0	55	88.7	71	92.2	
	No	4	8.0	7	11.3	5	6.5	
	Omitted	0	0.0	0	0.0	1	1.3	

PD = Potential Dropouts, HSG = High School Graduates,

PSA = Post Secondary Attenders

Summary

It would appear that a variety of differences exist between the self-concepts of potential dropouts and those of students thought to be likely to remain in school. While an analysis of the data collected clearly delineated such differences, statistically significant relationships were not always evident and as such, the results should be interpreted with some degree of caution.

The students who were identified as potential dropouts aspired to occupations of lower socioeconomic status, expressed lower educational aspirations, displayed more negative feelings with respect to themselves and their place in the world of work and with respect to their experiences at home, at school, and with peers. Also, they appeared to make more depersonalized career choices and to exhibit more external locus of control.

While an examination of these affective aspects of self-concept showed many differences between the groups of students identified, little difference was noted between their levels of occupational knowledge.

CHAPTER V

Conclusions, Implications, and Recommendations

The purpose of this study was to investigate career maturity among elementary school children to determine whether or not differences existed between students who were identified as potential dropouts and those identified as being likely to complete high school or to attend a post secondary institution. This study attempted to identify differences in the self-concepts of these three groups of students and to examine the impact of these differences upon the respective patterns of career development.

This chapter will outline the similarities and differences which emerged with respect to the profiles of the three groups of students and will compare the profile of the potential dropout with that of the dropout identified in the literature.

Students Identified as Potential Dropouts

With respect to the demographic and sociological variables examined, the students who were identified as

potential dropouts appeared to be predominantly males who were living in rural settings. For the most part, they were shown to come from lower socioeconomic backgrounds and often from larger families. In this study, there was no evidence to suggest a link between the phenomenon of dropping out and the stability of the family unit. This involved an examination of the predicted academic futures of students from single parent homes.

There was evidence to suggest that age and school retention are related to dropping out as more Grade 6 students and students who had repeated one or more grades were thought to be likely to leave school early.

An analysis of the variables constituting self-concept as it relates to career development also depicted clear trends with respect to the potential dropout. This was particularly evident in the case of the more affective variables. For example, an examination of the career aspirations of these students indicated that while the majority of them aspired to occupations of middle level socioeconomic status, they were more apt to select low status occupations than their counterparts in the two remaining groups. The educational aspirations of the potential dropouts followed a similar pattern. Although most of them stated that they would complete high school

and go on to pursue a post secondary education, they were also more likely to indicate the reverse.

These students expressed negative feelings with respect to themselves and their place in the world of work, demonstrated an external locus of control, made depersonalized career choices, and expressed negative feelings concerning their experiences at home, at school and with peers.

The amount of occupational knowledge demonstrated by the potential dropouts was not significantly different from that of the students in the two remaining groups. Their ability to identify the functions served by individuals in different occupations was generally adequate. They were observed however, to experience some difficulty with the roles played by accountants, lawyers, and architects. They displayed a lack of knowledge regarding the educational requirements of occupations and the relative earnings of people in different jobs. These students performed very well when required to classify occupations on the basis of some common characteristic.

Students Identified as Being Likely to
Complete High School

An analysis of the demographic and sociological variables yielded the following data concerning the students who were identified as being likely to complete high school. The majority of these students were males who lived in urban settings. However, the distribution between males and females and urban and rural students was far more equitable with respect to this group than as had been with the potential dropouts.

Like the potential dropouts, the majority of these students were shown to come from lower socioeconomic backgrounds but it was also noted that a greater percentage of them were from middle level backgrounds.

With respect to family structure, it was observed that the majority of students in this group were from families in which there were three or four children. There were far fewer families with more than four children among this group than there had been among the potential dropouts. Also, the greatest percentage of single parent families were found here.

The affective aspects of self-concept also depicted a particular profile of the students who were thought to

be likely to complete school. As with the potential dropouts, the majority of these students aspired to middle status occupations but fewer selections of low status occupations were made. Practically all of these students indicated that they would complete high school and more than as had been the case among the potential dropouts stated that they would obtain a post secondary education.

Overall, the students identified as being likely to complete high school expressed more positive feelings with respect to themselves and their abilities. They communicated more favourable opinions regarding themselves as learners and future workers, demonstrated more internal locus of control, and expressed more positive feelings concerning their relationships with significant others. Like the potential dropouts however, the majority of these students continued to make more depersonalized career choices.

In the area of occupational knowledge, it was found that the students thought to be likely to complete high school did not perform significantly better than the potential dropouts on the questionnaire items designed to assess their understanding of the functions served by people in various occupations or the educational require-

ments of certain jobs. They did appear to demonstrate a greater knowledge of the relative earnings of people in different occupations.

Students Identified as Being Likely to Attend
a Post Secondary Institution

Of the three groups of students identified, the students who were thought to be likely to attend a post secondary institution displayed the healthiest self-perceptions and the greatest level of career maturity.

An examination of the demographic and sociological variables provided the following information regarding these students. The majority of students in this group were females in Grade 6 who lived in the urban setting. It is important to note that the percentage of urban students who fell within this category was only slightly greater than that of rural students.

With respect to family structure, it was noted that the greatest percentage of these students were from homes in which there were only one or two children in contrast with the two remaining groups of students who were shown to come from larger families. Within this group there

was also some incidence of single parent families, the percentage of which however, was marginally less than either of the other groups.

As was the case with the potential dropouts and the identified high school graduates, the majority of these students came from lower socioeconomic backgrounds. There was however, a greater concentration of these students from middle level socioeconomic backgrounds as well as from the more affluent high status backgrounds.

These students displayed the most positive perceptions of themselves as learners and future workers. As with the two other groups, the majority of students within this group aspired to occupations of middle level status. Across the groups it was observed that more students identified as being likely to attend a post secondary institution aspired to high status occupations and very few made choices in the low status category. Also, all of these students indicated that they would complete high school and more students than in any other group stated that they would pursue a post secondary education.

These students generally expressed the most positive perceptions of the world of work and of their ability to achieve success therein, demonstrated an internal locus

of control, made personalized career choices, and portrayed themselves as being able to maintain favourable relationships with family, peers and school personnel.

While little difference was shown between either of the three groups with respect to their levels of occupational knowledge, the students who are thought to be likely to attend a post secondary institution demonstrated a better understanding of the educational requirements of various occupations as well as the relative earnings of individuals in different occupations.

Summary

These findings indicate clear differences between the three groups of students identified in this study in terms of their self-perceptions and the resulting orientations toward the world of work. The profiles progressed from least positive for the potential dropouts to most positive for the students thought to be likely to attend a post secondary institution, with the most striking differences evident with respect to the demographic and situational factors and the students' evaluations of

their performance in the roles played during this particular life stage.

Recognizing the importance of early experiences in the development of positive self-perceptions and favourable orientations to the world of work, these findings suggest that elementary schools may need to concentrate more upon the affective aspects of education and provide organized and structured opportunities for career guidance.

The Potential Dropout

Having presented a picture of the potential dropout, it is now necessary to compare his/her characteristics with those which have been identified in previous research and to discuss the implications of these findings.

As already stated, the bulk of existing literature dealing with the dropout problem has focused upon individuals who have already left school and as a result, the characteristics outlined relate to young people in their mid-to-late teenage years. The results of this study indicated many similarities between the potential dropout

and the dropout as described in the literature.

The demographic and sociological variables investigated in this study included sex, age/grade, place of residence, family size, socioeconomic status and the nature of the family unit.

The potential dropouts identified in this study were predominantly male. This finding was consistent with existing research (Leaving Early, 1984; Cervantes, 1965). While some investigation has been carried out with respect to sex differences in school achievement, learning style, and career development, it would appear from the dropout statistics and from the results of this study, that such differences are important and may exert more influence than is presently recognized.

Males have been shown to have a higher incidence of learning problems than females (Rumberger, 1983; Lerner, 1985) and to have more negative attitudes toward education (Anderson, 1982; Rumberger, 1983). While attempts have been made to explain this phenomenon in terms of biological influences (Khan & Cataio, 1984; Fausto-Sterling, 1985), socialization practises (Nicholson, 1984; Yeager & Mieztis, 1985), and teacher-student interactions (Brophy & Good, 1974; Brophy, 1985), further investigation is necessary.

The finding that the majority of potential dropouts were grade six dropouts was not surprising as it has been long recognized that as age increases, children's educational morale decreases (Jersild & Tasch, 1949). Linked with this variable of age however, is that of school retention. The results of this study indicate that students who had repeated grades were more likely to be identified as potential dropouts than their peers who had not been held back. This finding was also consistent with existing research in that dropouts have been found to be held back five times more often than graduates (Curley, Griffin, Althea & Savitsky, 1971).

Considering the fact that school retention has been found to contribute to the student's alienation from school and to the development of negative attitudes toward self and school (Reich & Young, 1975; Howell & Frese, 1982; Leaving Early, 1984; Pawlovich, 1985), it may be necessary for the practise of school retention to be further investigated. The results of such investigation may indicate more appropriate means of which to meet the needs of underachieving students.

Research indicates that the geographic location in which a student lives can influence whether or not he/she decides to leave school. In this study, the greatest

number of potential dropouts lived in rural settings. This finding was supported by Kaplan and Luck (1977) and Leaving Early (1984).

Research has linked this phenomenon with the way of life in rural communities. Socioeconomic variables such as adult illiteracy, family size, and chronic nonemployment have been found to be influential with respect to low educational outputs in rural communities (Kitchen 1968). A cycle exists in which unemployment remains high because people are poorly educated, yet people fail to see the value of education because of the limited availability of jobs (Building on Our Strengths, 1986).

As a result of this way of life, students tend to develop a fatalistic attitude and believe that there is little likelihood that they will be able to improve their lot in life (Kitchen, 1968). One implication for educational programming for these students might be to assist them to develop decision-making skills whereby they may make informed choices that will enhance the quality of their lives and encourage the development of a more internal locus of control.

It has also been suggested that within the province of Newfoundland, the school curriculum provides little relevance to the kind of life which exists or can be

expected to exist in rural areas (Building on Our Strengths, 1986). Such findings indicate that an examination of the curriculum may be necessary in an attempt to provide direction for the development of programs which may better meet the needs of students. It is the opinion of the author that the development of entrepreneurial skills would be of particular value in assisting these individuals to contribute to the growth of their own communities.

The results of this study indicated that the greatest percentage of fathers in low status occupations were those of the children who had been identified as potential dropouts. This finding is consistent with existing research (Beck & Muia, 1980; Schulenberg et al., 1984). Low socioeconomic status has been linked to differences in socialization patterns, more limited access to resources which would permit children to pursue higher levels of learning (Schulenberg et al., 1984), and sets of values and attitudes which conflict with those maintained by the school (Beck & Muia, 1980). While such factors are beyond the realm of influence of the school in terms of its ability to change them, it is felt by the author that it is important for educators to recognize their existence and to be aware of their implications.

The finding that children who decide to leave school often come from large families (Howell & Frese, 1982; Beck & Muia, 1980) was supported by this study. Larger families have been found to be associated with a greater division of material resources, parental time and support, authoritarian parental practices, father domination, less positive affect, and more parental stress than smaller families (Schulenberg et al., 1984). Again, while the school is able to do little in terms of changing this situation, an understanding of the student's environment is essential.

While research has indicated that school dropouts often come from broken homes (Howell & Frese, 1982; Beck & Muia, 1980), this finding was not supported by this study. Although few single-parent families were identified, the greatest percentage of students in this situation were thought to be likely to complete high school. This phenomenon was unable to be explained by the author.

Regarding the measurement of self-concept as it relates to career development in this study, findings supported those of previous research which have indicated that school dropouts have negative self-perceptions (Pawlovich, 1985; Gadwa & Griggs, 1985; Reich & Young, 1975).

The negative expectations of the dropouts and potential dropouts with respect to educational and occupational achievement appears to result from a complex interaction of the personal and situational variables already discussed and the results of experience. The repeated failures and negative school experiences of school dropouts (Pawlovich, 1985; Gadwa & Griggs, 1985) precipitate a low sense of self-efficacy (Schunk, 1985) which is then thought to influence future achievement (Schunk, 1984). These findings suggest that it is important for educators to be concerned with the development of positive affect as well as intellect. This would be particularly crucial with respect to students who are identified as being at risk of dropping out.

The students identified as potential dropouts in this study appeared to demonstrate the same feelings of alienation with respect to family and peers as has been identified among dropouts (Cervantes, 1966; Schreiber, 1984; Beck & Muia, 1980; Pawlovich, 1985). This implies that efforts should be made to assist such students to develop better social and interpersonal communication skills.

While career guidance programming would likely be of benefit to all students, the results of this study

indicate that it would be of particular importance to potential dropouts. It is the opinion of the author that such programming should emphasize personal development and encourage the growth of skills which would enhance the quality of life career choices.

Summary

From the results of this study, it is apparent that there are many characteristics which differentiate a child who is "at risk" of dropping out from one who is likely to complete school. From a very early age, children react to a host of factors in their lives which interact to shape the nature of their school experiences.

The bulk of the research with respect to the dropout problem has, to date, concentrated upon the sociological and demographic influences. This study has supported the findings of previous investigations in these areas. For example, it was found that greater percentages of students who were classified under the following headings, were identified as potential dropouts. These headings included male students, those living in rural areas, students from lower socioeconomic backgrounds, and

students who have repeated one or more grades in school.

This study has also given rise to questions regarding the more personal characteristics of the individuals themselves. For example, the focus of this study was to assess the self-concepts of elementary school children as they relate to career development and to look for possible differences between those of children thought to be "at risk" of dropping out and those of children thought to be likely to complete school. These differences were clearly evident in the effective aspects of career development-related self-concept as outlined in this study. The identified potential dropouts displayed lower educational and occupational aspirations than their peers, expressed more negative feelings with respect to themselves and their place in the world of work, demonstrated more external locus of control, appeared to make more depersonalized career choices, and expressed more negative feelings concerning their experiences at home, at school, and with peers.

While definitive statements cannot be made on the basis of this research with respect to the nature of the relationship between career development-related self-concept and dropping out, it is the opinion of the author that further study in this area would be worthwhile. The

dropout problem is one which is very overwhelming for educators in terms of knowing where to begin to do something about it. As many of the factors which influence a child's decision to leave school are beyond the realm of influence of educators, it is the opinion of the author that the findings of this study offer possibilities of areas in which schools can make an impact.

Recommendations

The following recommendations for future research resulted from this study.

1. As indicated in this study, attempts have not yet been undertaken to clearly define the construct career maturity as it relates to young children. It is felt by the author that future research should endeavour to provide a better understanding of the components of career maturity at this level and to develop instruments to facilitate its measurement.

2. The results of this study as well as those of various other studies (Leaving Early, 1984; Cervantes, 1965) have indicated that students who drop out of school

are predominantly male. It is recommended that future research be directed toward examining the implications for existing school programs and determining whether or not there is any relationship between these programs and gender as it relates to dropping out. Also, while some research has been carried out in an attempt to explain psychoeducational sex differences in terms of differences in the socialization process of males and females (Yeger & Miezitis, 1985) and in terms of differences in interactions between teachers and male and female students (Brophy, 1985; Brophy & Good, 1974), it is recommended that further research be conducted in these areas. Specific directions for such research might include an examination of the learning styles, problem solving strategies, and task-approach skills of males and females, the degree of fit between these particular learning styles and various teaching practices, and the impact of existing curriculum content on such differences.

3. The findings of this study regarding the link between school retention and dropping out were consistent with those of other studies (Curley, et al., 1971) in that students who had repeated grades were more likely to be identified as potential dropouts. It is recommended

that future research examine more closely the nature of this relationship. Specific emphasis should be placed upon identifying both the academic and affective consequences of school retention and if necessary, should provide direction for the development of instructional practices by which to better meet the needs of students who are at risk of dropping out.

The following recommendations for practise resulted from this study.

1. While all students require career guidance, the following program elements would be critically important for the potential dropout:

- providing exposure to a wide variety of accurate career models,
- providing opportunities for the development of planning and decision-making skills,
- providing opportunities for the exploration of personal interests and abilities as they relate to career choice, to foster an understanding of the intrinsic value of work, and
- providing opportunities for the development of entrepreneurial skills such as creative thinking and risk-taking.

2. Emphasis should be placed on affective as well as academic outcomes in school and with respect to the potential dropout particularly, attempts should be made to:

- provide opportunities for success so as to develop feelings of self-efficacy and more internal locus of control, and
- provide social skills programming so as to facilitate the development of effective interpersonal communication skills.

References

- Anderson, C.S. (1982). The search for school climate: A review of the research. Review of Educational Research, 52(3), 368-420.
- Beck, L., and Muia, J.A. (1980). A portrait of a tragedy: Research findings on the dropout. The High School Journal, 64(2), 65-72.
- Berry, E. (1979). Guidance and counselling in the elementary school. Its theoretical base. The Personnel and Guidance Journal, 57(1), 513-520.
- Blishen, B.R., and McRoberts, H.A. (1976). A revised socioeconomic index for occupations in Canada. Canadian Review of Sociology and Anthropology, 13(1), 71-79.
- Brophy, J.E. (1985). Interactions of male and female students with male and female teachers. In L.C. Wilkinson and C.B. Marrett (Eds.), Gender influences in classroom interaction - Educational psychology series (pp. 115-141). Orlando, FL: Academic Press, Inc.
- Brophy, J.E., and Good, J.L. (1974). Teacher-student relationships: Causes and consequences. New York: Holt, Rinehart, and Winston.

- Building on our strengths. (1986). Report of the Royal Commission on Employment and Unemployment. St. John's, Newfoundland
- Calhoun, G., Jr., and Morse, W.C. (1977). Self-concept and self-esteem: Another perspective. Psychology In Schools, 14(3), 318-322.
- Cervantes, L.F. (1965). The dropout: Causes and cures. Ann Arbor Paperbacks, The University of Michigan Press.
- Chapmann, J.W., Cullen, J.L., Boersma, F.J., and Maguire, J.O. (1981). Affective variables and school achievement: A study of possible causal influences. Canadian Journal of Behavioral Science, 13(2), 181-192.
- Coombs, J., and Cooley, W.W. (1968). Dropouts in school and after school. American Educational Research Journal, 5(3), 343-363.
- Creason, F., and Schilson, D.L. (1970). Occupational concerns of sixth-grade children. Vocational Guidance Quarterly, 18, 219-224.
- Crites, J.O. (1974). Career development processes: A model for vocational maturity. In E.L. Herr (Ed.), Vocational guidance and human development (pp. 296-320). Boston: Houghton Mifflin.

- Curley, T., Griffin, C.L., Althea, S., and Savitsky, A.M. (1971). The social system: Contributor or inhibitor to the school dropout. US: Educational Resources Information Center. (ERIC Document No. ED-049-344).
- Fausto-Sterling, A. (1985). Myths of gender - biological theories about women and men. New York: Basic Books, Inc.
- Gadwa, K., and Griggs, S.A. (1985). The school dropout: Implications for counselors. The School Counselor, 33(1), 9-16.
- Gadzella, B.M., and Williamson, J.D. (1984). Study skills, self-concept, and academic achievement. Psychological Reports, 54(3), 923-929.
- Green, K.D., Beck, S.J., Forehand, R., and Vosk; B. (1980). Validity of teacher nominations of child behavior problems. Journal of Abnormal Child Psychology, 8(3), 397-404.
- Gribbons, W.D., and Lohnes, P.R. (1968). Emerging careers. New York: Teachers College Press, Columbia University.
- Hales, L.W., and Fenner, B. (1972). Work values of 5th, 8th, and 11th grade students. Vocational Guidance Quarterly, 20(3), 199-203.

- Havighurst, R.J. (1953). Human development and education. New York: David McKay Company, Inc.
- Henjum, R., Preyma, N., and Stargardter, R. (1987). Career education in elementary schools: Perspectives and an application. In D. Studd (Ed.). Vocational counselling in schools - Special edition (pp. 107-115). Minister of Supply and Services, Canada.
- Herr, E.L., and Cramer, S.H. (1988). Career guidance and counselling through the life span - Systematic approaches (3rd edition). Boston: Little, Brown & Company.
- Holland, M. (1981). Relationship between vocational development and self-concept in sixth grade students. Journal of Vocational Behavior, 18, 228-236.
- Howell, F.M., and Frese, W. (1982). Early transition into adult roles: Some antecedents and outcomes. American Educational Research Journal, 19, 51-73.
- Jersild, A.J., and Tasch, R.J. (1949). Children's interests and what they suggest for education. New York: Teachers' College, Columbia University.
- Jordaan, J.P., and Heyde, M. (1979). Vocational maturity during the high school years. New York: Teachers College Press, Columbia University.

- Kaplan, J.L., and Luck, E.C. (1977). The dropout phenomenon as a social problem. Educational Forum, 42, 41-46.
- Kaufman, J.J. (1968). The school environment and programs for dropouts. Pennsylvania State University, Institute for Research on Human Resources.
- Khan, A.U., and Catalo, J. (1984). Men and women in biological perspective - A review of the literature. New York: Praegar Publishers.
- Kitchen, H.W. (1968). A preliminary study of demographic and socioeconomic factors in the Atlantic provinces and their relationships to measures of educational output. Memorial University of Newfoundland. The Atlantic Development Board.
- Leaving Early. (1984). A study of student retention in Newfoundland and Labrador. St. John's, Newfoundland.
- Lerner, J.H. (1985). Learning disabilities - Theories, diagnosis, and teaching strategies (4th edition). Boston: Houghton Mifflin Company.
- Maples, M. (1984). Self-concept, locus of control, and self-discipline: Variable constructs for effective classroom management. Humanistic Education and Development, 80-87.

- Miller, M.F. (1978). Childhood experience antecedents of career maturity attitudes. Vocational Guidance Quarterly, 27(2), 137-143.
- Mills, B. (1984). An investigation of the relationship of the self-concept and young children's readiness for school. Early Child Development and Care, 14, 177-188.
- Morine-Dersheimer, G. (1978-79). The anatomy of teacher prediction. Educational Research Quarterly, 3(4), 59-65.
- Morton-Williams, R., and Finch, S. (1968). Young school leavers. London: Her Majesty's Stationery Office.
- Nelson, R.C. (1963). Knowledge and interest concerning sixteen occupations among elementary and secondary students. Educational and Psychological Measurement, 27, 741-754.
- Nicholson, J. (1984). Men and women - How different are they? London: Oxford University Press.
- Parker, H.J. (1970). Twenty-nine thousand seventh-graders have made occupational choices. Vocational Guidance Quarterly, 18, 219-224.
- Pawlovich, H. (1985). Early school leaving: Antecedents, correlates, and consequences. Guidance and Counselling, 1(2), 41-54.

- Reich, C., and Young, V. (1975). Patterns of dropping out. Interchange, 6(4), 6-15.
- Rich, N. (1979). Occupational knowledge: To what extent is rural youth handicapped? Vocational Guidance Quarterly, 27(4), 320-325.
- Rumberger, R.W. (1983). Dropping out of high school: The influence of race, sex, and family background. American Educational Research Journal, 20(2), 199-220.
- Santrock, J.H., and Yussen, S.R. (1987). Child development - An introduction (3rd edition). Dubuque, Iowa: Wm. C. Brown Publishers.
- Schreiber, D. (1964). (Ed.). Guidance and the school dropout. Washington, DC: American Personnel and Guidance Association.
- Schulenberg, J.E., Vondracek, F.W., and Crouter, A.C. (1984). The influence of the family on vocational development. Journal of Marriage and the Family, 46, 129-143.
- Schunk, D. (1984). Self-efficacy perspective on achievement behavior. Educational Psychologist, 19(1), 48, 58.
- Schunk, D. (1985). Self-efficacy and classroom learning. Psychology in the Schools, 22, 208-223.

- Sewell, T.E., Palmo, A.J., and Manni, J.L. (1981). The school dropout; psychological, academic, and vocational factors. Urban Education, 16(1), 65-76.
- Shavelson, R.J. (1976). Teachers, decision making. In N.L. Gage (Ed.). The psychology of teaching methods. Chicago, IL: The National Society for the Study of Education.
- Shavelson, R.J., Hubner, J.J., and Stanton, G.C. (1976). Self-concept: Validation of construct interpretations. Review of Educational Research, 46(3), 407-441.
- Shavelson, R.J., Cadwell, J., and Izu, T. (1977). Teachers' sensitivity to the reliability of information in making pedagogical decisions. American Educational Research Journal, 14, 83-97.
- Shavelson, R.J., and Stern, P. (1981). Research on teachers' pedagogical thoughts, judgments, and decisions, and behavior. Review of Educational Research, 51(4), 455-498.
- Super, D.E. (1957). The psychology of careers. New York: Harper & Row.
- Super, D.E. (1969). Vocational development theory: Persons, positions, and processes. The Counseling Psychologist, 1, 2-9.

- Super, D.E. (1980). A life-span, life space approach to career development. Journal of Vocational Behavior, 16(3), 282-298.
- Super, D.E. (1982). The relative importance of work: Models and measures for meaningful data. The Counseling Psychologist, 10(4), 95-102.
- Super, D.E., and Bohn, M.J. (1970). Occupational psychology. Belmont, CA: Wadsworth Publishing Company, Inc.
- Titone, J.S. (1982). Educational strategies for preventing students from dropping out of high school. Palo Alto, CA: R&E Research Associates, Inc.
- Thornburg, H.D. (1975). Attitudinal determinants in holding dropouts in school. Journal of Educational Research, 68(5), 181-185.
- Torrance, E.P. (1983). The importance of falling in love with something. The Creative Child and Adult Quarterly, 8(2), 72-79.
- Whiteside, M., and Merriman, G. (1976). Dropouts look at their teachers. Phi Delta Kappan, 57, 701-702.
- Wideman, W., and Clarke, J. (1987). Understanding self-image: A guide for educators. Guidance and Counseling, 2(3), 24-31.

Yeger T., and Miezeitis, S. (1985). Pupil sex as it relates to the pupil-teacher dependency relationship. International Journal of Women's Studies, 8(5), 457-464.

The following sources were used in the development of the questionnaire which was used to collect data for this study:

Crites, J.O. (1978). Career maturity inventory. Monterey, CA: McGraw-Hill Inc.

Jobs for your future. (1980). Toronto, Ontario: University and College Placement Association.

One step at a time: Educational and career explorations. (1984). A Support Document to Guidance, Intermediate and Senior Divisions. Ontario: Ministry of Education.

McClure, R.M. (1980). Destiny career planning manual. Toronto, Ontario: University and College Placement Association.

Measures of self-concept. (1972). Los Angeles, CA: Instructional Objectives Exchange.

Your future after high school. (1980). Toronto, Ontario: University and College Placement Association.

Women's Bureau of Labour Canada. (1986). When I grow up - Career expectations and aspirations of Canadian school children. Ottawa: Publications Distribution Centre.

APPENDIX A

Career Maturity Survey

1. Student Number: _____
2. Grade: _____
3. Age: _____
4. Boy: _____ Girl: _____
5. Mother's Job: _____
6. Father's Job: _____
7. How many children are in your family? _____
8. Does your mother live with you? _____
9. Does your father live with you? _____
10. (a) What do you want to be when you grow up?

- (b) Where did you get this idea?

11. Why do we need to go to school to learn things?

12. (a) Do you think you will finish high school?

YES

NO

(go to Part B)

(go to Part C)

- (b) If yes, why? _____

- (c) If no, why not? _____

13. (a) Do you think you will go to university?

YES

NO

(go to Part B)

(go to Part C)

- (b) If yes, why? _____

- (c) If no, why not? _____

14. Match each job with the sentence that describes it by putting the letter by the job in the blank by the correct sentence.

(a) air traffic _____ cares for patients in hospitals, nursing

- (b) accountant homes, and doctors' offices.
- (c) lawyer _____ helps people to manage their money.
- (d) nurse _____ sells drugs that were prescribed by a doctor.
- (e) architect _____ tells airplane pilots when to take off and land.
- (f) pharmacist _____ designs buildings and homes.
- _____ works in a courtroom on law and order matters.

15. For which of these occupations would you have to go to school the longest?

Lawyer Secretary Teacher

16. In which of these occupations do you think you would earn the most money?

Dentist Police Officer Librarian

17. (a) Many jobs are involved with helping people with their problems from home and school. Name one of these jobs.
-

(b) Name one job that involves danger or adventure.

(c) Name one job that involves working outdoors.

18. When I grow up I would like to have a job which would allow me to: (Check the 3 things which are most important to you.)

_____ have some spare time.
_____ make a lot of money.
_____ own my own business.
_____ make close friends.
_____ be someone important.
_____ be outdoors a lot.

19. Different things are important to different people. Check the 4 things which are most important to you.

_____ to share
_____ to be easy to get along with
_____ to be honest
_____ to make my own decisions
_____ to be kind to others
_____ to get the things I enjoy most
_____ to be happy
_____ to be accepted

20. Read each of the sentences below and decide whether they are true or false for you.

- (a) I guess everybody has to go to work but I don't look forward to going to work. _____
- (b) All jobs are important. _____
- (c) You can do any kind of work you want to as long as you try hard. _____
- (d) Your parents probably know better than anyone else which job you should enter. _____
- (e) Work is boring. _____
- (f) Work is much like going to school. _____
- (g) There is only one occupation for each person. _____
- (h) If you get a good job it is because you are lucky. _____

21. Below is a list of jobs which many people do. Look at each job and if you know a person who works at this job, put a check mark by it.

- | | |
|---------------------|-------------------|
| _____ Architect | From where? _____ |
| _____ Computer | |
| _____ Programmer | From where? _____ |
| _____ Fisherman | From where? _____ |
| _____ Social Worker | From where? _____ |
| _____ Plumber | From where? _____ |

_____	Artist	From where? _____
_____	Farmer	From where? _____
_____	Cashier	From where? _____
_____	Newspaper	
	Reporter	From where? _____
_____	Auto Mechanic	From where? _____

22. (a) Who decides what you would have for breakfast?

_____	mother	_____	sister
_____	father	_____	brother
_____	you	_____	other

(b) Who decides what clothes you will wear for the day?

_____	mother	_____	sister
_____	father	_____	brother
_____	you	_____	other

23. (a) It is ten thirty in the morning and the bell has just rung for recess. You go to your locker to get your snack and you discover that you have left your lunch box on the school bus. What are three things you could do to solve this problem?

1. _____
2. _____
3. _____

- (b) From the three ideas you have written above tell which is the best solution to your problem.

- (c) Why is the answer you chose in Part B the best solution?

24. (a) Name 2 things that you can do well.

- (b) Name 2 things that you cannot do very well.

25. Read each sentence and decide whether it is TRUE or FALSE for you. Write T or F in each blank.

- (a) My parents are interested in the things

I do.

- (b) I would like to drop out of school.

- (c) I am a good person.

- (d) I have many friends.

- (e) I am a very happy person.

- (f) I am among the last to be chosen for teams.

(g) I can usually figure out difficult things. _____

(h) School work is fairly easy for me. _____

(i) I am proud of my school work. _____

(j) I get along well with other children. _____

(k) My family listens to me. _____

(l) My family and I have a lot of fun together. _____

26. Look at the jobs listed below. Then think of the boys and girls in your class or that are your age. What jobs do you think these children will have when they are grown up? Put a check mark in the space that best tells what these children could be when they grow up.

	Both Girls		
	<u>Girls</u>	<u>Boys</u>	<u>and Boys</u>
(a) Astronaut	_____	_____	_____
(b) Doctor	_____	_____	_____
(c) Store Owner	_____	_____	_____
(d) Secretary	_____	_____	_____
(e) Nurse	_____	_____	_____
(f) Bank Manager	_____	_____	_____

(g) Teacher (elementary school)	_____	_____	_____
(h) School Principal	_____	_____	_____
(i) Sales Person	_____	_____	_____
(j) Police Officer	_____	_____	_____
(k) Librarian	_____	_____	_____
(l) Forest Ranger	_____	_____	_____
(m) Dancer	_____	_____	_____
(n) Dentist	_____	_____	_____
(o) Teacher (high school)	_____	_____	_____
(p) Model	_____	_____	_____
(q) Grocery Clerk	_____	_____	_____
(r) Social Worker	_____	_____	_____
(s) Minister/Rabbi/Priest	_____	_____	_____

APPENDIX B

Teacher Prediction Checklist

Please identify each student in your class and place a check mark in the category which you think best describes his or her academic potential.

Student Number	Will not complete high school	Will complete high school	Will attend a post secondary institution
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			

Student Number	Will not complete high school	Will complete high school	Will attend a post secondary institution
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
31.			
32.			
33.			
34.			
35.			
36.			
37.			
38.			
39.			
40.			



